

Applied Discrete Mathematics Degree Option

SAMPLE PROGRAM OF STUDY

Total of 120 credit hours required for graduation

There is considerable flexibility in designing a program of study. The example given below is not likely to fit every

situation and is provided for information as you develop your own plan with your academic advisor.

Fall Semester Freshman		Credits
MATH 1225	Calculus of a Single Variable Pathway 5f	4
MATH 1004	Discovering Mathematics I (fall only)	1
ENGL 1105	First-Year Writing, Pathway 1f	3
	Pathway 2	3
	Pathway 3	3
	Pathway 6a	3
		17

Fall S	emeste	er Sophomore	Credits
MAT	H 2114	Introduction to Linear Algebra	3
MAT	H 2204	Intro Multivariable Calculus	3
cs	2114	Software Des & Data Structures Pathwa	y 6d 3
		Pathway 3	3
		Pathway 4	3
			15

Fall Semester Junior		Credits
MATH 3124	Modern Algebra	3
MATH 3214	Calculus of Several Variables	3
MATH 3134	Applied Combinatorics & Graph Theory	3
CS 3114	Data Structures and Algorithms	3
	Free Elective	3
		15

Fall Semester Senior		Credits	
MATH	4XXX	4000-level MATH course ³	3
матн	4XXX	4000-level MATH course ³	3
cs	4104	Data and Algorithm Analysis ⁴	3
		Free Elective	3
		Free Elective	3
			15

Spring Semester Freshman		Credits
MATH 1226	Calculus of a Single Variable Pathway 5f	4
MATH 1044	Discovering Mathematics II (spring only)	2
CS 1114	Introduction to Software Design	3
ENGL 1106	First-Year Writing, Pathway 1f	3
	Pathway 7 ¹	3
		15

Spring Semester Sophomore		
MATH 2214	Intro to Differential Equations Pathway 5a	3
MATH 3034	Intro to Proofs (Prereq: C in MATH 2114)	3
CS 2505	Introduction to Computer Organization	3
	Pathway 2	3
	Pathway 4	3
		15

Spring Semester Junior		Credits
MATH 3144	Linear Algebra I	3
MATH 3224	Advanced Calculus	3
STAT	STAT 4105 ² , STAT 4705, or STAT 4714	3
	Free Elective	3
	Free Elective	3
		15

Spring Semester Senior	Credits	
MATH 4XXX 4000-level MATH course ³	3	
MATH 4XXX 4000-level MATH course ³	3	
Pathway 1a	3	
Free Elective	3	
Free Elective	3	
	15	

¹ In Pathways, some courses can be used for Pathway Concept 7 plus one other Concept, but no other double-counting is permitted.

²See Timetable of Classes for prerequisite information.

³ At least two courses from 4124 (fall only), 4134 (spring only), 4144 (spring only), 4175, 4176, 5114 (spring only), 5454 (fall only), 5464 (spring only) must be included. At most one of 4044 and 4334 is allowed. At most one of 4425 and 4564 is allowed. 4574, 4625, 4626, 4644, 4654, and 4664 may not be used. Students must petition the Associate Chair to use 4974, 4984, or 4994. Courses that do not count toward the in-major GPA may not be used.